

# SMD Power Inductor CDRH5D18C



Halogen  
Free



## Description

- Ferrite drum core construction.
- Magnetically shielded.
- L × W × H: 6.3 × 6.2 × 2.0 mm Max.
- Product weight: 0.23g(Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.
- Halogen Free available.

## Environmental Data

- Operating temperature range: -40°C~+105°C (including coil's self temperature rise)
- Storage temperature range: -40°C~+105°C
- Solder reflow temperature: 260 °C peak.

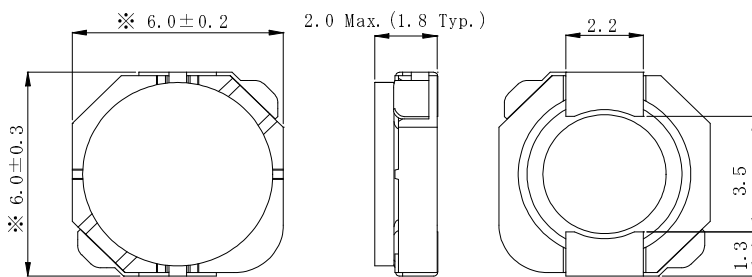
## Packaging

- Carrier tape and reel packaging
- 12.9" diameter reel
- 2000pcs per reel

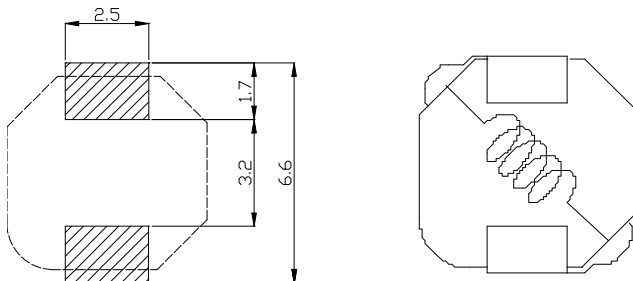
## Applications

- Ideally used in MP3, PDA, HDD, DSC/DVC, Notebook PC etc. as DC-DC converter inductors.

## Dimension - [mm]



## Land pattern and Schematics - [mm]



# SMD Power Inductor CDRH5D18C



## Electrical Characteristics

Part Name	Stamp	Inductance ( $\mu$ H) [ within ] ※1	D.C.R. (m $\Omega$ ) Max. (Typ.) (at 20°C)	Saturation Current (A) ※2		Temperature Rise Current (A) ※3
				at 20°C	at 105°C	
CDRH5D18CNP-1R0MC	1R0	1.0 $\pm$ 20%	21.0(16.8)	4.16	3.28	3.80
CDRH5D18CNP-1R5MC	1R5	1.5 $\pm$ 20%	25.6(20.5)	3.36	2.70	3.50
CDRH5D18CNP-2R0MC	2R0	2.0 $\pm$ 20%	32.7(26.1)	2.90	2.30	3.00
CDRH5D18CNP-3R3MC	3R3	3.3 $\pm$ 20%	48.3(38.7)	2.30	1.84	2.50
CDRH5D18CNP-4R7MC	4R7	4.7 $\pm$ 20%	60.4(48.3)	2.00	1.60	2.20
CDRH5D18CNP-5R6MC	5R6	5.6 $\pm$ 20%	77.9(62.3)	1.76	1.44	1.90
CDRH5D18CNP-6R8MC	6R8	6.8 $\pm$ 20%	86.0(68.8)	1.68	1.36	1.80
CDRH5D18CNP-8R2MC	8R2	8.2 $\pm$ 20%	110.2(88.1)	1.44	1.16	1.50
CDRH5D18CNP-100MC	100	10 $\pm$ 20%	132.0(105.6)	1.30	1.08	1.40
CDRH5D18CNP-120MC	120	12 $\pm$ 20%	165.0(132.0)	1.20	0.96	1.25
CDRH5D18CNP-150MC	150	15 $\pm$ 20%	197.8(158.2)	1.10	0.88	1.15
CDRH5D18CNP-220MC	220	22 $\pm$ 20%	290.4(232.3)	0.92	0.72	0.95
CDRH5D18CNP-330MC	330	33 $\pm$ 20%	430.9(344.7)	0.72	0.60	0.75
CDRH5D18CNP-470MC	470	47 $\pm$ 20%	605.4(484.1)	0.62	0.50	0.60

※1. Inductance measuring condition: at 100kHz.

※2. Saturation current: The value of D.C. current when the inductance decreases to 70% of it's nominal value.

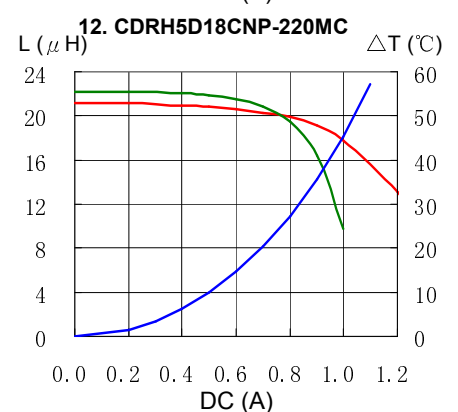
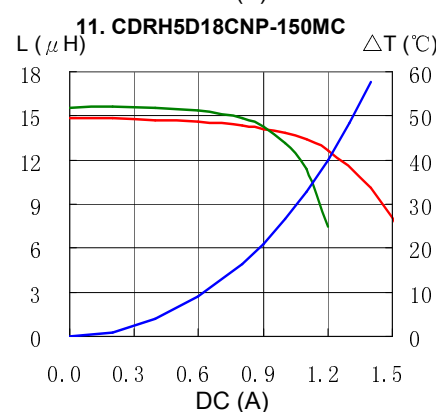
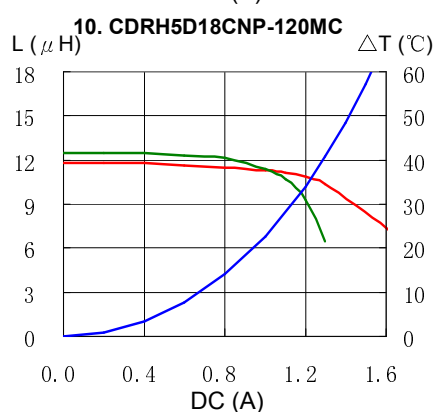
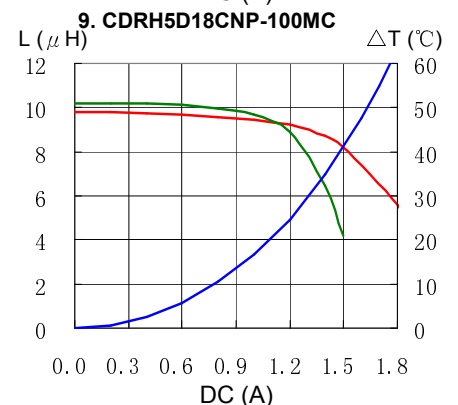
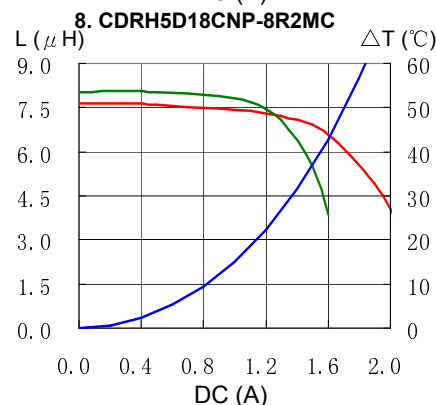
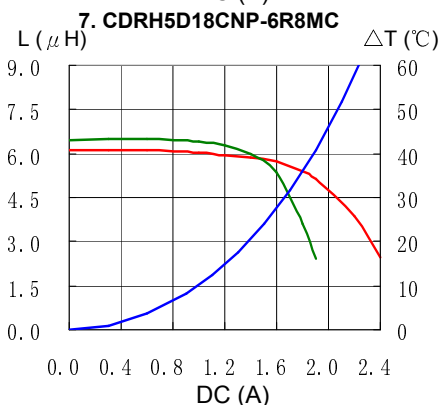
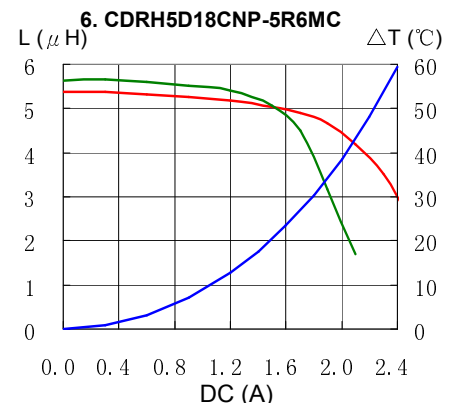
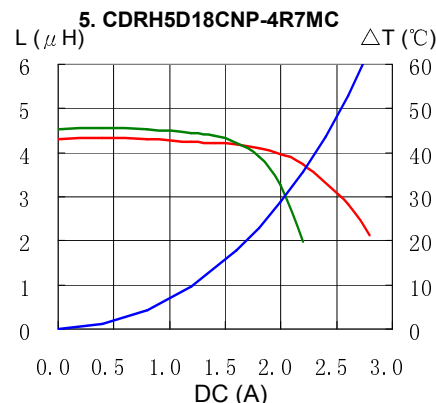
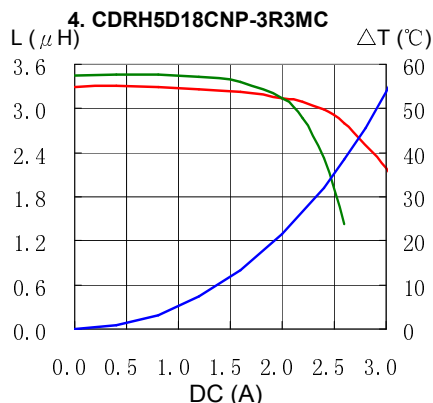
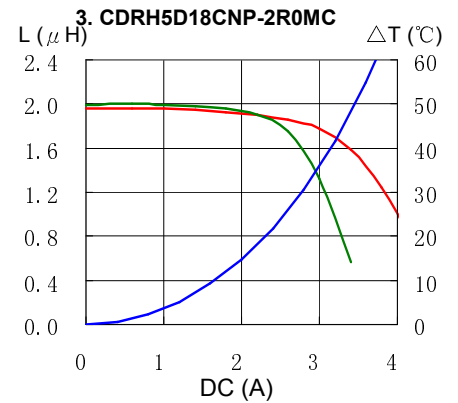
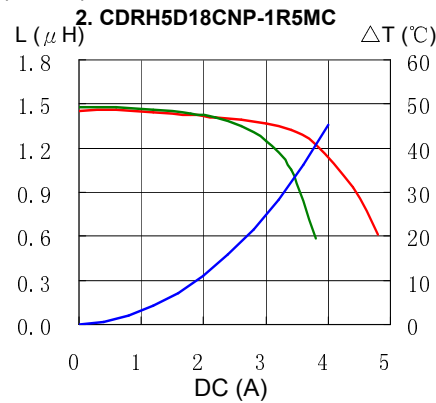
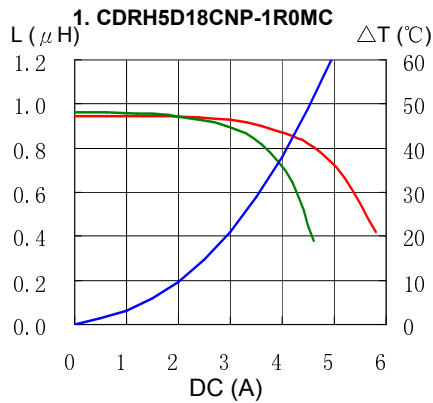
※3. Temperature rise current: The value of D.C. current when the temperature rise is  $\Delta t=40^{\circ}\text{C}$  ( $T_a=20^{\circ}\text{C}$ ).

# SMD Power Inductor CDRH5D18C



## Saturation Current & Temperature Rise Graph

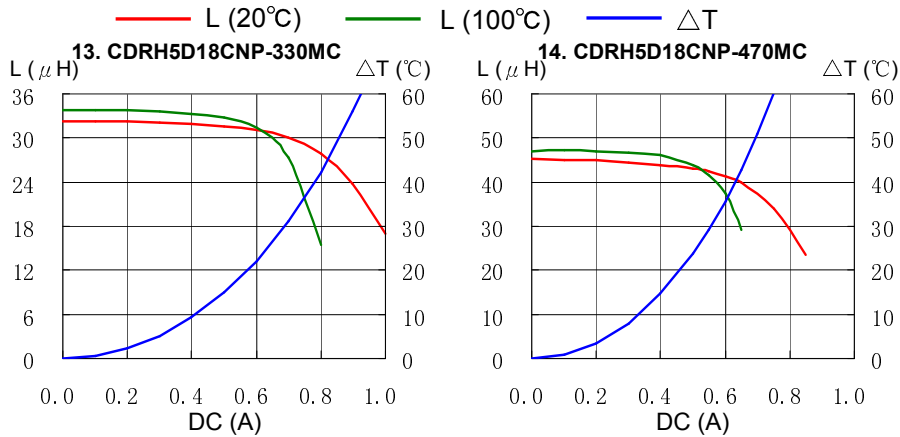
— L (20°C) — L (105°C) —  $\Delta T$



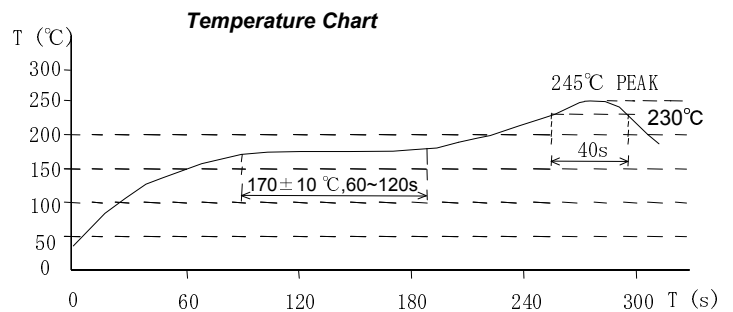
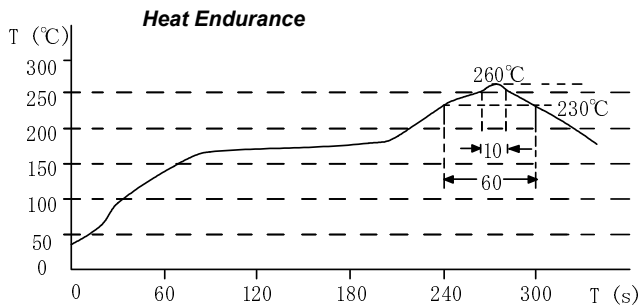
# SMD Power Inductor CDRH5D18C



## Saturation Current & Temperature Rise Graph



## Solder Reflow Condition



Please refer to the sales offices on our website - <http://www.sumida.com>

**Hong Kong**  
Tel.+852-2880-6781  
FAX.+852-2565-9600  
[sales@hk.sumida.com](mailto:sales@hk.sumida.com)

**Saitama(Japan)**  
Tel.+81-48-691-7300  
FAX.+81-48-691-7340  
[sales@jp.sumida.com](mailto:sales@jp.sumida.com)

**Chicago**  
Tel.+1-847-545-6700  
FAX. +1-847-545-6720  
[sales@us.sumida.com](mailto:sales@us.sumida.com)

**Shanghai**  
Tel.+86-21-5836-3299  
FAX.+86-21-5836-3266  
[shanghai.sales@cn.sumida.com](mailto:shanghai.sales@cn.sumida.com)

**Seoul**  
Tel.+82-2-6237-0777  
FAX.+82-2-6237-0778  
[sales@kr.sumida.com](mailto:sales@kr.sumida.com)

**Oberzell**  
Tel.+49-8591-937-0  
FAX. +49-8591-937-103  
[contact@eu.sumida.com](mailto:contact@eu.sumida.com)

**Shenzhen**  
Tel.+86-755-8291-0228  
FAX.+86-755-8291-0338  
[shenzhen.sales@cn.sumida.com](mailto:shenzhen.sales@cn.sumida.com)

**Singapore**  
Tel.+65-6296-3388  
FAX.+65-6841-4426  
[sales@sg.sumida.com](mailto:sales@sg.sumida.com)

**Neumarkt**  
Tel.+49-9181-4509-110  
FAX. +49-9181-4509-310  
[infocomp@eu.sumida.com](mailto:infocomp@eu.sumida.com)

**Taipei**  
Tel.+886-2-8751-2737  
FAX.+886-2-8751-2738  
[sales@tw.sumida.com](mailto:sales@tw.sumida.com)

**San Jose**  
Tel.+1-408-321-9660  
FAX.+1-408-321-9308  
[sales@us.sumida.com](mailto:sales@us.sumida.com)